552
CONTROL VOLTAGE TO MIDI CONVERTER

Four LEDs indicate converter activity

12 position-switch to select the desired kind of Midi-data at the Midi output.
Separately switchable for each of the four converters.

QUAD CONTROL VOLTAGE TO MIDI CONVERTER

MIDI DESTINATION 1-4

CV IN 1

A.TOUCH — NOTE ON — VELOCITY
CC 20 — PITCH
PED — MOD.
SUS. — VOL.
BREATH — PAN

GATE IN 1

MIDI CHANNEL CONFIGURATION

1·1·1·1   1·1·2·2   1·1·1·2   1·2·3·4
5·5·5·5   5·5·6·6   5·5·5·6   5·6·7·8

Eight Midi channel configurations are provided to ease the setup.

Control voltage inputs for the four CV/Midi converters

CV IN 2

A.TOUCH — NOTE ON — VELOCITY
CC 20 — PITCH
PED — MOD.
SUS. — VOL.
BREATH — PAN

GATE IN 2

CV IN 3

A.TOUCH — NOTE ON — VELOCITY
CC 20 — PITCH
PED — MOD.
SUS. — VOL.
BREATH — PAN

GATE IN 3

TRANSPOSE MODE

1 OFF — ON
2 OFF — ON
3 OFF — ON
4 OFF — ON

Four switches to activate the transposition function by Midi- or control voltage separately for each of the four converters

gate signal inputs for the four CV/Midi converters

CV IN 4

A.TOUCH — NOTE ON — VELOCITY
CC 20 — PITCH
PED — MOD.
SUS. — VOL.
BREATH — PAN

GATE IN 4

TRANSPOSE INPUT

CV — MIDI

Select Midi- or control voltage as the transposition source (simultaneously for the four converters)

CV TRANSPOSE IN

MIDI TRANSPOSE IN

MIDI OUT

Transpose input for analog control voltages 1 V/oct. (The most recently captured semitone from an attached keyboard will be added to the current note generated by the CV/Midi converter, when in „Note On"-position.)

Transpose input for a midi-keyboard (the note-number from the most recent struck key on the attached midi-keyboard will be added to the current note generated by the CV/Midi converter, when in „Note On"-position.)
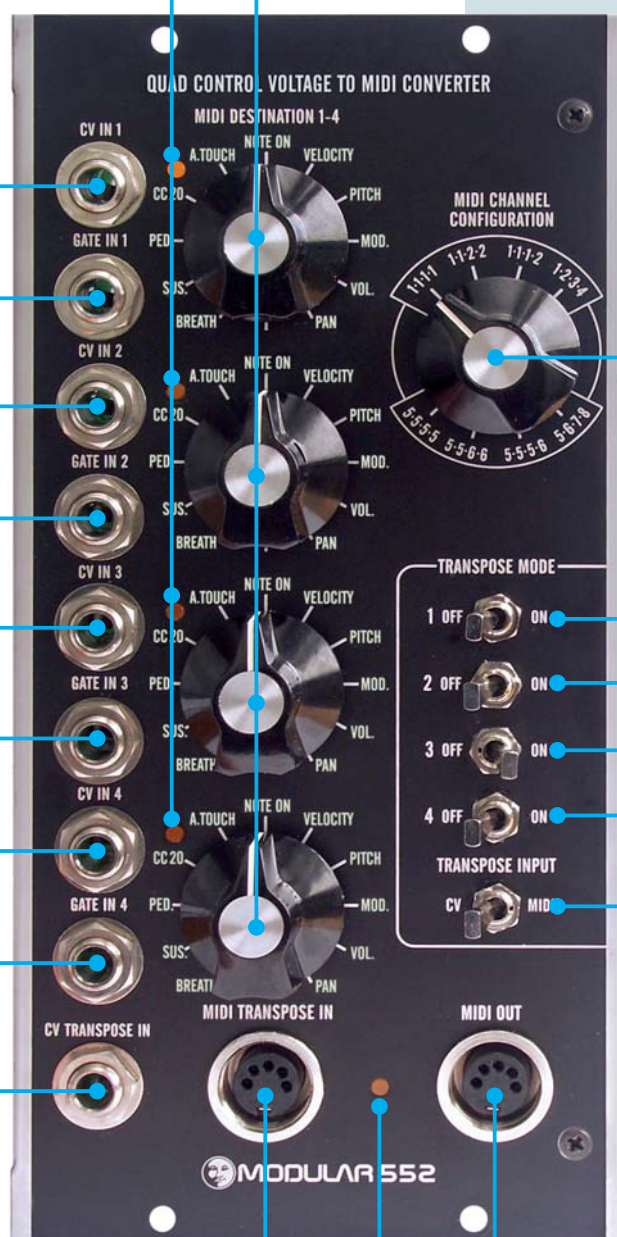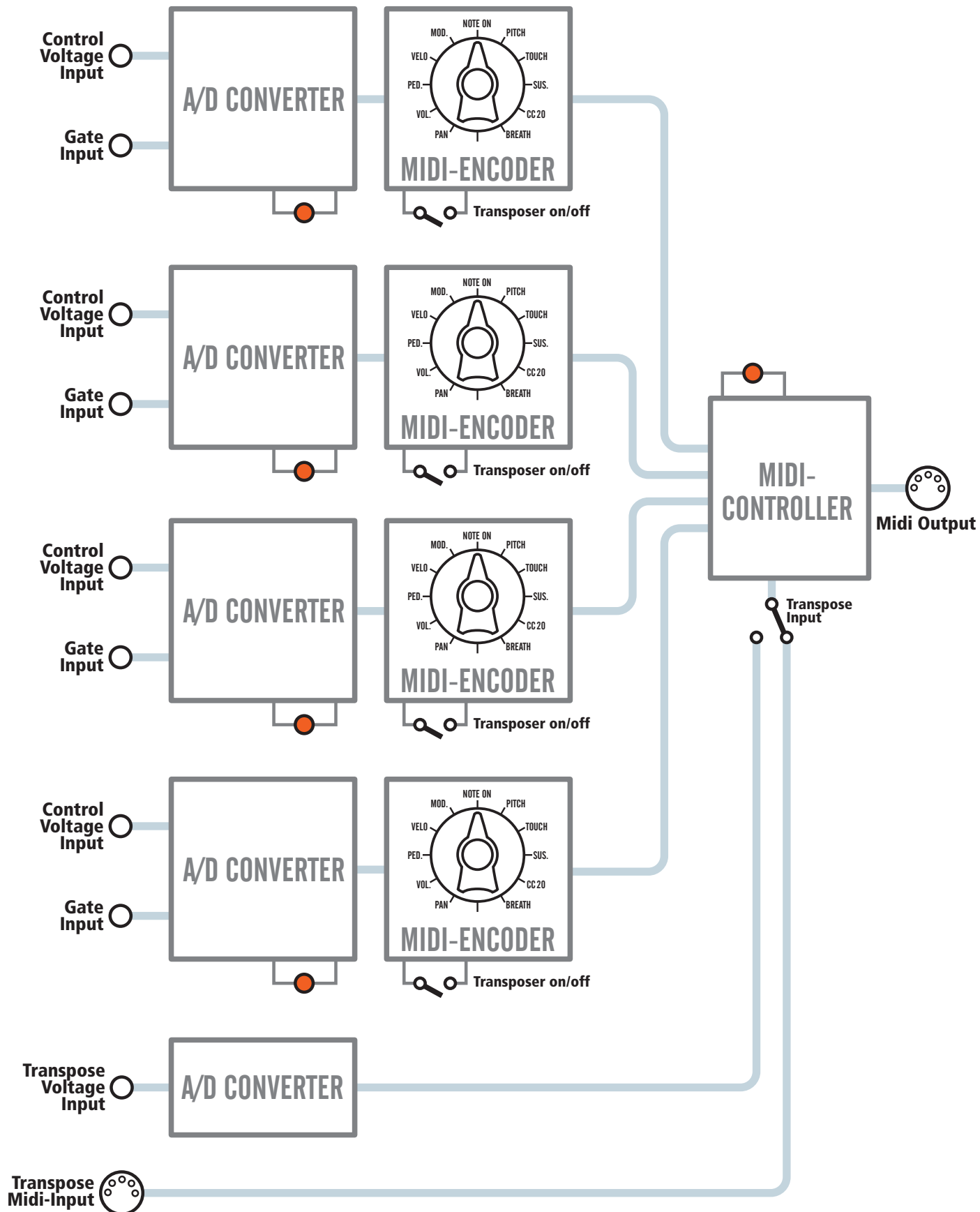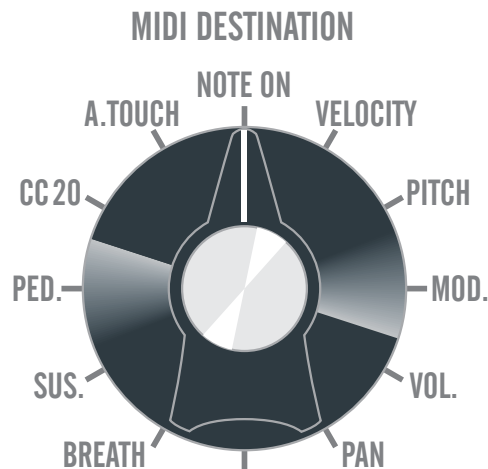
Midi-activity-LED

Midi-output

MODULAR 552

552
CONTROL VOLTAGE TO MIDI CONVERTER

Control Voltage Input

Gate Input

A/D CONVERTER

NOTE ON
MOD. PITCH
VELO TOUCH
PED. SUS.
VOL. CC 20
PAN BREATH

MIDI-ENCODER

Transposer on/off

Control Voltage Input

Gate Input

A/D CONVERTER

NOTE ON
MOD. PITCH
VELO TOUCH
PED. SUS.
VOL. CC 20
PAN BREATH

MIDI-ENCODER

Transposer on/off

Control Voltage Input

Gate Input

A/D CONVERTER

NOTE ON
MOD. PITCH
VELO TOUCH
PED. SUS.
VOL. CC 20
PAN BREATH

MIDI-ENCODER

Transposer on/off

Control Voltage Input

Gate Input

A/D CONVERTER

NOTE ON
MOD. PITCH
VELO TOUCH
PED. SUS.
VOL. CC 20
PAN BREATH

MIDI-ENCODER

Transposer on/off

MIDI-CONTROLLER

Midi Output

Transpose Input

Transpose Voltage Input

A/D CONVERTER

Transpose Midi-Input

552
CONTROL VOLTAGE TO MIDI CONVERTER

MIDI DESTINATION

A.TOUCH · NOTE ON · VELOCITY
CC 20 · PITCH
PED. · MOD.
SUS. · VOL.
BREATH · PAN

NOTE-ON

Derives a Midi-**Note-on** command from a combination of control voltage and gate signal.
The value of the velocity at the Midi-output is always 127 if it is not generated with a separate converter (see below).
Range: 0 to +10 volts, according to the Midi note numbers from 0 – 127.

This controller generator needs both a control voltage AND gate signal at the analog inputs.

VELOCITY

Derives Midi-**Velocity** data from the control voltage present at the analog input.

This function is only working in combination with a second converter switched to "Note On" as the Midi-velocity-information is part of a note-on command only :

With channel combination **1-1-2-2/5-5-6-6**, converter 2 & 4 provide velocity data only when converter 1 & 3 are switched to 'Note-on'.

With **1-1-1-2/5-5-5-6** converter 2 provides velocity data only when converter 1 is switched to 'Note-on'.

With **1-1-1-1/5-5-5-5** converter 2 provides velocity data only when converter 1 is switched to 'Note-on'.

The value of the release velocity value is always 0.
Range: 0 to +10 volts according to the Midi controller range of 0 – 127.

This controller generator needs a control voltage at the analog inputs.

PITCH

Derives a chain of **Pitch-Bend**-commands from the control voltage present at the analog input.
Range: 0 to +10 volts with 5 volts as zero position (no pitch bending); Midi data range -8192 to +8192, but in a 128 controller steps resolution only.

This controller generator needs a control voltage at the analog inputs.

MOD.

Derives Midi modulation (**Controller 1**) commands from the control voltage present at the analog input.
Range: 0 to +10 volts according to the Midi controller range 0 – 127.

This controller generator needs a control voltage at the analog inputs.

VOL.

Derives main volume (**Controller 7**) commands from the control voltage present at the analog input.
Range: 0 to +10 volts according to the Midi controller range 0 – 127.

This controller generator needs a control voltage at the analog inputs.

PAN.

Derives Midi-panorama **(Controller 8)** commands from the control voltage present at the analog input.
Range: 0 to +10 volts according to the Midi controller range 0 – 127 (left-right).

This controller generator needs a control voltage at the analog inputs.

BREATH

Derives breath controller (**Controller 2**) commands from the control voltage present at the analog input.
Range: 0 to +10 volts according to the Midi controller range 0 – 127.

This controller generator needs a control voltage at the analog inputs.

SUS.

Derives a sustain-pedal-command (**Controller 64**) from the input state of the gate signal.
It's an on/off switch only.

This controller generator needs only a gate signal at the analog inputs.

PED.

Derives expression pedal (**Controller 4**) commands from the control voltage present at the analog input.
Range: 0 to +10 volts according to the Midi controller range 0 – 127.

This controller generator needs a control voltage at the analog inputs.

CC 20

Derives an undefined **Controller 20** command set from the control voltage present at the analog input.
Depending on the MIDI-device connected this command may be used to control various internal parameters.
Range: 0 to +10 volts according to the Midi controller range 0 – 127.

This controller generator needs a control voltage at the analog inputs.

A.TOUCH

Derives **Channel-Aftertouch**-comands from the control voltage present at the analog input.
Range: 0 to +10 volts according to the Midi controller range 0 – 127.

This controller generator needs a control voltage at the analog inputs.

„SECRET FUNCTION" ;-)

In the "6 o'clock" position the converter derives Midi-**Program Change**-commands from the control voltage present at the analog input.
Range: 0 to +10 volts according to the Midi program changes 0 – 127 (or 1 – 128, depending on the connected synthesizer).

This controller generator needs a control voltage at the analog inputs.

552
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MIDI CHANNEL CONFIGURATION

1-1-1-1
All four converters send on channel 1.
(E. g. to control four parameter on ONE synthesizer simultaneously via the four converters, as note-on, velocity, modulation and cutoff-frequency).

1-1-2-2
Converters 1 and 2 send on channel 1, converters 3 and 4 send on channel 2.
(E. g. to control two synthesizer-voices with two parameters each via the according converters, as note-on and velocity).

1-1-1-2
Converters 1, 2 and 3 send on channel 1, converter 4 sends on channel 2.
(E. g. to control one synthesizer-voice with three parameters via the according converters, as note-on, velocity and modulation, and a separate voice with normally not-on via the fourth converter).

1-2-3-4
Converters 1, 2, 3 and 4 send on four different Midi channels 1/2/3/4
(E. g. to control four different synthesizer-voices via all converters; typically using note-on commands).

5-5-5-5
All four converters send on channel 5.
(E. g. to control four parameter on ONE synthesizer simultaneously via the four converters, as note-on, velocity, modulation and cutoff-frequency).

5-5-6-6
Converters 1 and 2 send on channel 5, converters 3 and 4 send on channel 6.
(E. g. to control two synthesizer-voices with two parameters each via the according converters, as note-on and velocity).

5-5-5-6
Converters 1, 2 and 3 send on channel 1, converter 4 sends on channel 2.
(E. g. to control one synthesizer-voice with three parameters via the according converters, as note-on, velocity and modulation, and a separate voice with normally not-on via the fourth converter).

5-6-7-8
Converters 1, 2, 3 and 4 send on four different Midi channels 5/6/7/8
(E. g. to control four different synthesizer-voices via all converters; typically using note-on commands).

For more information on the internal coupling of note-on and velocity data see page 3, under „VELO".

„Panic Button"
Changing the Midi channel configuration generates an „all notes off" comand.

Midi-Destination
Changing the Midi-destination generates a „note off" command, to prevent stuck notes.

552

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Port to connect
an M591 Quad Switch
Matrix Router

Jumpers to select
a) chained input jacks
b) connection to the M591 port

Power supply input
for COTK cable adapter

Power supply input
for synthesizers.com
cable adapter

Operating voltage
–Voltage = -15 volts
+Voltage = +15 volts
They can be adapted to
Moog standard (- 6/+12 Volts)
or to -12/+12 Volts
as custom order – please ask us.